UNITED STATES PATENT AND TRADEMARK OFFICE

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DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/6/05*.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17 and 20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-17 and 20 have been examined.

Response to Amendment

2.   The Amendment filed on 10/6/05 is sufficient to overcome the prior rejection. A new

reference has been added to the 35 USC 103 rejection.

Claim Rejections - 35 USC § 112

3.   Claim 1-17 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. The claim amendments made on 10/6/05 render the claims

unclear.

As an example, claim 20 states, "terms of a transaction. . .based on a respective rate of

reservation to reflect changes to conditions of the terms occurring at the first time interval and

the second time interval". The claim is unclear. The relation between the terms of transaction,

rate of reservation, and changes in condition is unclear. For example, do the changes of

conditions affect the rate of reservation and the rate of reservation affect the terms of

transaction? Or, do the rate of reservation and changes in condition independently affect the

terms of transaction?

Or, in claim 1, is the rate of reservation a current number for how many reservations are

made or an estimate of how many reservations will be made based on the factors affecting the

discount services?

Also, Examiner notes that the Attorney of Record, Randall Beckers (30,358), was

contacted on November 1, 2005 at the telephone number (202)434-1500 provided in the Office

Action dated 10/6/05. Examiner informed the Attorney of the Examiner's concerns with the

amended claims dated 10/6/05 and pointed out the features of concern. Attorney informed the

Examiner that the Attorney would call the Examiner back to discuss the claim amendments in

more detail. However, the Examiner received no further communications from the Attorney.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiff

(6,477,533) in view of DeLorme (5,948,040) in view of Baker (6,266,648) in view of Cragun

(6,622,125) in view of Demir (2001/0044788) or in view of Campbell (5,918,209).

Claim 1, 17, 20: Schiff discloses a method for accepting transaction reservation,

comprising the steps of:

electronically presenting information on discount services defined for each time period to

a plurality of customers (col 20, lines 41-44; col 20, lines 58-65; col 22, lines 1-13 ; col 11, line

60-col 12, line 17; col 12, lines 22-36; col 7, lines 20-34);

electronically accepting information on transaction reservation of discount services at a

selected time period by a customer (col 12, lines 17-23; col 12, lines 22-36); and performing a

transaction according to the reserved discount services, when the visiting time of a customer to a

shop, or the finish time of the transaction is included in the time period in association with said

accepted information on transaction reservation (col 20, line 49-col 21, line 12; col 13, lines 17-

22; col 1, lines 22-26; col 22, lines 1-5; col 12, lines 14-17).

Schiff further discloses that the time period can be a defined as a term for the transaction

(col 20, lines 41-44; col 20, lines 58-65; col 22, lines 1-13).

Because Schiff discloses custom packages can vary based on sailing date and special

discounts (col 1, lines 21-26), Schiff implies that custom packages can be created where special

discounts and sailing dates are related variables to the overall package.

Schiff further discloses that incentives, time periods, and reservations are related (col 22,

lines 1-13; col 1, lines 22-26), accepting the transaction reservation for the transaction target,

performing a transaction in accordance with the transaction reservation (col 12, lines 17-36), and

re-presenting data based on the accepted transaction reservation for the transaction target (col 11,

lines 10-16; Fig. 2b; Fig. 3a).

Schiff does not explicitly disclose that the discounts are related to the time period that the

reservation is made for.

However, DeLorme discloses that presenting bargain data to a transaction target related

to the time period that the reservation is made for (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6; col

41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45).

DeLorme further discloses re-presenting bargain data based on the accepted reservation

for the transaction target (Fig. 9b; Fig. 7b; Fig. 7a; Fig. 5d, item 595).

DeLorme further discloses a terms determination unit for determining terms for a

transaction of a transaction target for each time period (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6;

col 41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45); and

a display system for displaying the terms for the transaction, wherein the transaction reservations

are made via the plurality of terminal devices based on the display terms for the transactions

(Fig. 5d; Fig. 1c; Fig. 9b).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to add DeLorme's reservations goods or services with time period based

discounts to Schiff's time period, reservation, discount related information. One would have

been motivated to do this in order to provide the customer with further, specific information on

the relation of time periods, reservations, and discounts.

Baker further discloses benefits and discounts (col 1, lines 10-50); reservations (Fig. 3);

timing restrictions and other terms on applicable discounts (col 1, lines 55-62); time frame

restrictions and other terms on applicable discounts (col 5, lines 35-45; col 6, lines 40-47; col 6,

lines 47-61; col 7, lines 4-11);

Baker further discloses offering specialized target discounts where the terms or target can

be varied including varying time periods for when the discount would apply (col 8, line 60-col 9,

line 10) and specialized discounts based on the time between the when the reservation is made

and when the reservation is made for (col 9, lines 14-26).

Baker further discloses correlating time periods for reservations to discounts (col 9, lines 31-64).

Baker further discloses that different time periods have different discounts and that the discount information for the different time periods is dynamic (col 10, line 59-col 11, line 7). Also, note that Baker discloses that the time between when the reservation is made and the time that the reservation is made for can be relevant to the discount amount (col 9, lines 14-26). Therefore, both the reservation time and the time period the reservation is made for are relevant to the discount.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Baker's reservations for goods or services with time period based discounts that reflect temporarily changing conditions to Schiff's time period, reservation, discount related information. One would have been motivated to do this in order to provide the customer with further, specific information on the relation of time periods, reservations, and discounts.

Baker also discloses varied time periods (June or July) and that the user can select a time period within the varied time periods (col 10, line 58-col 11, line 7).

Also, note that Baker (col 9, lines 14-26) discloses 'rapidly changing conditions' and that a discount is offered several days before a certain date and that the discount is offered for that date based on the temporarily changing condition that the plane is half full. Therefore, both the time period that the reservation is made in (several days before), the time period for the transaction or travel to be enacted (the date of the flight or the time period that the user will be

away or travelling), and the temporarily changing condition (the plane is presently half full) of

the reservation are relevant to the discount being offered.

Additionally, DeLorme discloses making reservations and that information on factors

affecting reservations can be provided to the user and that temporal data that affects reservations

can be provided to the user including information such as time periods and weather related

information:

"(9) http://www.expedia.msn.com offers a similar Internet Web Site "travel agency" to

book flights, hotel rooms, and rental cars; to participate in travel forums; and to browse assorted

news, weather, currency, multimedia guidebooks, and photographs. These types of online

systems have some capability in permitting the user to gain access to a wide array of

services, including travel and activities; however, as earlier noted, this capability is not easily

enacted in that the user must go through a considerable search process in order to gather

information regarding topics, events, available goods or services, and/or points of interest at the

travel destination or along the travel route, or related to the user's selected travel time frame.

Other Internet sites concentrate on local directory listing information but do not provide readily

useable travel planning, itinerary, routing and/or booking capabilities--e.g., CitySearch.TM.

and MetroBeat.TM. at http://www.citysearch.com and Bigbook's Internet Yellow

Pages at http://www.bigbook.com (col 3, line 63-col 4, line 15);

(66)   Also included in the standard TRIPS data structure, shown in FIG. 3, is a sub-

structure for characteristic TEMPORAL DATA, in turn, managed primarily by the Temporal

Subsystem 223 in FIG. 2 (also, in TIMES, at 419, in FIG. 4). Such TEMPORAL DATA

addresses years, dates, times, other usual chronological measures, indicators and/or arrays

pertaining to events, time periods, appointments, actual happenings or postulated temporal

occurrences--as recorded, proposed, scheduled, negotiated or predicted at points or periods in

time, typically by one or more persons, interested parties or organizations, including TRIPS

retail users or participating travel information/service providers. In FIG. 2, TRIPS 203 stores,

retrieves and processes TEMPORAL DATA or chronologically related information utilizing

well known means. TEMPORAL DATA in FIG. 3 and corresponding Temporal or Times

Subsystem further include or manage the following: (1) for typical well-articulated TRIPS

embodiments, an extensive, browsable, searchable calendar database and display of EVENTS

OF INTEREST (EOIs) for queries and responses related to scheduled, predicted or proposed

event of all kinds; (2) the related SCHEDULER sub-menu functionality for travel itinerary

management, as presented heretofore in FIG. 1C under 161, and further described hereinafter

relative to FIG. 6; (3) digital almanac functionality formed of tools and data related to the

dates/times and other dimensions of natural phenomena--such as sunrise, sunset, high and low

tide, moon phases, rainfall/temperature averages, and other data which is useful for planning

and scheduling outdoors activities like hiking, camping, boating, observing nature, and so forth-

-as described in more detail hereinafter, with particular reference to FIGS. 6 and 9; (4) updates

or more current information on diverse topics, replacing or supplementing earlier information

and preferably provided online for freshness" (col 33, lines 17-52).

DeLorme further discloses discounts and special offers that vary (below and throughout

the DeLorme disclosure):

"(6) The user can make reservations and buy various tickets in "real-time" online--and

download "today's" special discount offers from hosts of participating restaurants, hotels, retail

shops, car rental agents, outdoor expedition outfits, or other third-party providers of

goods/services throughout the United States, Canada and Mexico (col 14, lines 25-35);

(11)(2) paper or sheet media maps, travel directions, itineraries or travel schedules,

reservation/discount offer/ticket documents, supplemental text and/or graphic information about

events of interest (EOI) or points of interest (POI) 109" (col 15, lines 35-40).

DeLorme discloses special offers presented relative to temporally changing conditions

including the utilization of time periods:

"(49) for example, including other characteristic TRIPS records information about one or

more lodgings or other accommodations located nearby the performance location(s), or

available transportation to the performance(s), or proximate timely special offers e.g.

for tickets to the music performance(s). More details on combined searches appear hereinafter

relative to FIGS. 2-8 (col 29, lines 1-10);

(119)>(2) persons in the reservation party, and so forth--using the 595 dialog box. The

595 dialog box includes facilities for the user to input or accept special offers, such as a

discount for meals at certain times. The user executes or "books" the proposed reservation,

pushing the "BOOK IT" button in the "RESERVATIONS--TICKETS--COUPONS" dialog box

(col 50, lines 37-45);

(155) Thus, the TRIPS invention facilitates not only individualized travel planning or

informational output but also contractual or transactional travel arrangements--e.g. ticket

purchases, making reservations, taking advantage of special goods/service offers or options

(typically subject to locational and temporal restrictions or conditions)--and so forth (col 63,

lines 35-45);

(166) 5) date/time i.e. one or more chronological points in time, time-frames or temporal

ranges relating to the goods/services designated in the TRIPS map ticket e.g. air flight departure

date/time, time period for which a special offer is open, curtain time or the duration or start time

of an entertainment or educational event, seasonal/calendar/natural phenomena temporal

information, hotel check-in time, service appointment date/time" (col 67, line 60-col 68, line 2).

Baker discloses discounts to changing conditions such as locations and short time frames,

the providing of discounts related to inventory, and the providing of discounts related to special

conditions such as a service being half-utilized or half-full:

"(25) Further, the system offers the unique benefit of allowing service and goods

providers to make available specialized "niche" discounts or marketing schemes. Since the

system sorts or correlates benefit information, it would allow providers of goods and services to

target particular segments of the market. For example, in the travel industry, hotels could offer

through the system special discounts at particular locations or for very short time frames, in a

manner which would not otherwise be economically feasible with other marketing methods. In

the case of those offering goods for sale, a geographically weak sector of the market or one

which has excess inventory could be specifically targeted for discounts in the data base. In

other words, the system allows particular segments of the market to be precisely targeted by

providers of goods and services offering special discounts to consumers affiliated with enabling

organizations (col 8, line 60-col 9, line 10);

(26) A further advantage of the system relates to the relatively short lead times required

in connection with offering benefits. According to the system, discounts could be developed

and offered very quickly with very short lead times by simply adding an enabling organization

benefit file to the database along with associated correlation information. This would enable a

service provider to take advantage of rapidly changing conditions or short-term opportunities.

As an example, several days before a scheduled flight, an airline might recognize that a flight

was going to depart half-full. Under such circumstances, the airline might wish to offer

discount benefits to members of particular enabling organizations which patronize the airline.

The result is a marketing benefit for the airline and a special premium to the enabling

organization, as well as its members" (col 9, lines 10-26).

Cragun discloses utilizing time, date, weather, customer, in-store data to predict customer

sales and utilize the information with a purchase advisor system (Fig. 18; Fig. 19).

Cragun discloses the discount services are determined based on calculations results of

factors affecting the discount services, providing promotions based on time periods and factors

that affect the purchases for those time periods, providing promotions based on calculations of

factors that affect transactions during different time periods or under different conditions:

"(10) In a parallel distributed processing model, information processing takes place

through interactions of simple processing elements that send excitatory and inhibitory signals to

other processing elements. In a neural network, a data item is represented in numerical form

and is presented to the neural network. In this context, the processing elements referred to as

neurons can represent, for example, hypotheses about which sales promotion program is most

likely to elicit viewer interaction given a weather season or which sales promotion program is

most likely to attract viewers given a particular time of day. In the preferred embodiment,

neural network architecture comprises a first group of input neurons, each of which are

connected to one or more layers of intermediate neurons. The layers of intermediate neurons

are connected together and ultimately to a layer of output neurons. Information is processed

by the network as data flows from the input neurons, through the intermediate layers, and

finally to the output neurons. Each neuron in one layer is connected to every neuron in adjacent

layers (col 6, lines 27-46);

(6) Trends in purchases are sometimes relatively simple to observe. For example, there

typically is a seasonal need for particular items, such as coats during winter or sandals during

summer. Both national and local marketing campaigns might choose to call attention to such

items through a sales promotion comprising a temporary price reduction. Presumably,

customers will be motivated by the seasonal need and by the price reduction to purchase the

items, thereby creating higher volume sales and increased profits. Another example of an in-

store sales promotion is one that occurs after a sales clerk completes a transaction for the

purchase of an item by suggesting the purchase of a complementary item. A typical suggestion

occurs when, for example, a clerk suggests the purchase of an electric light bulb after a

customer has already purchased a lamp or suggests a sauce or topping to go along with a

purchased food entree. Given a set of sales promotions from which a promotion is selected, a

better quality selection is one that is more likely to result in an additional purchase (col 1, lines

40-60);

(48) After all of the purchase transactions in the relevant time period have been

processed, an outcome of "done" at the decision box numbered 224, the processing for the

creation of the class update structure is finished (box 225) and processing resumes with the flow

diagram box numbered 204 in FIG. 14 (col 15, lines 4-10);

(57) The first data field illustrated in the data structure 303 is for the time of day 304.

Time of day can be important in predicting customer populations because, for example, buyers

with particular characteristics might shop early in the day as opposed to those who shop late in

the day or late in the evening. The next data field is for the date 306. The date field permits

the system to account for seasonal buying characteristics, holiday variations, and other buyer

characteristics associated with the day of the week, month, or year. A weather data field 308

permits the system to further account for seasonal or other weather-related phenomenon. For

example, rainy weather likely will result in a customer population favorably disposed to

suggestions for purchases of rain gear such as boots, umbrellas, and overcoats, regardless

of other purchases made during a store purchase transaction" (col 17, lines 30-47).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to add Cragun's discount services that are determined based on

calculations results of factors affecting discounts services to DeLorme's special offers/discounts

related to temporal conditions. One would have been motivated to do this in order to better

assess how temporal conditions affect transactions and offer optimal promotions.

Additionally, DeLorme discloses offering the services based on the confirmed reserved

transaction and DeLorme discloses valid reservation confirmations and offering reservations that

allow the utilization of special offers or discounts:

"The system provides printed or electronic output that may include any one or more of

text itinerary, ordered set of travel maps, customized collection of information on points of

interest information and a selected array of valid reservation confirmations, tickets and/or

discount coupons coded with elements for automated recognition and processing. Mobile users, including GPS-linked users, can access the system via wireless communication units (Abstract).

More particularly, the present invention relates to Travel <u>Reservation</u> and Information Planning Systems (TRIPS) that provide travel information and <u>special</u> offers for goods and services such as accommodations and <u>reservations</u> associated with such areas of interest (col 1, lines 30-37).

(7)... These paperwork problems tend to be restricted to airline tickets and hotel <u>reservation</u> confirmations. However, a less developed but perhaps more important type of paperwork may be vouchers and various types of <u>coupons</u> associated with entertainment and activity sites located proximate to a travel destination (col 2, line 65-col 3, line 5).

(28)... TRIPS output is further capable, at 147, of including an airline <u>reservation</u> or other transportation <u>coupons</u> or vouchers, and/or various <u>special</u> price <u>discounts</u> and/or extra services offered by an extensive range of accommodation and goods or service providers that can participate in TRIPS e.g., hotels, banks, campgrounds, retail stores, hairdressers, gas stations, restaurants, taxis, video rental shops, tour guides, public safety, or health facilities--among many others. Thereby, TRIPS output provides the advantages of "built-in" <u>reservations, tickets</u> and/or <u>special</u> offers--as an intrinsic part of digitally generated, electronic and/or printed travel plan output also typically including maps, travel directions, itinerary or scheduling information concisely arranged in relation to the geographical/temporal order of travel--rather than a loose disarray of easily misplaced travel papers. The transactions involved in TRIPS <u>reservation,</u> ticket and/or <u>special</u> offer services are described hereinafter, particularly referring to FIG. 8" (col 21, lines 40-57).

Also, DeLorme disclsoes discount services defined for different time intervals or time

periods:

"(119) The 595 dialog box includes facilities for the user to input or accept <u>special</u> offers,

such as a <u>discount</u> for meals at certain times. The user executes or "<u>books</u>" the proposed

<u>reservation,</u> pushing the "<u>BOOK</u> IT" button in the "<u>RESERVATIONS--TICKETS--</u>

<u>COUPONS</u>" dialog box. The TRIPS technology communicates the <u>reservation</u> request and

facilitates its acceptance, rejection and/or alteration or a counteroffer from the participating

provider e.g. the Palisade restaurant or its agent(s) (col 50, lines 40-50).

(125)…a time-framed <u>special</u> offer for goods or services posted in TRIPS by a

participating third-party provider; or a time/date as negotiated by and between the retail user and

the TRIPS system operator and/or participating third-party provider for a dinner <u>reservation,</u> a

theatre or musical performance ticket, an educational conference, a sports or cultural

event, a scheduled flight or a passage or cruise by ship, and the like (col 52, lines 27-35).

(166). . . 5) date/time i.e. one or more chronological points in time, time-frames or

temporal ranges relating to the goods/services designated in the TRIPS map ticket e.g. air flight

departure date/time, time period for which a <u>special</u> offer is open, curtain time or the

duration or start time of an entertainment or educational event, seasonal/calendar/natural

phenomena temporal information, hotel check-in time, service appointment date/time, the

TRIPS user's estimated arrival time at a specific location (e.g. as computed by routing software

in the TRIPS Geographic Subsystem), a mutually agreed-on meeting date/time entered by the

user, and so forth" (col 67, line 60-col 68, line 5).

Baker further discloses offering specials in relation to timing and to changing conditions:

"This would enable a service provider to take advantage of rapidly changing conditions

or short-term opportunities. As an example, several days before a scheduled flight, an airline

might recognize that a flight was going to depart half-full. Under such circumstances, the

airline might wish to offer <u>discount</u> benefits to members of particular enabling organizations

which patronize the airline. The result is a marketing benefit for the airline and a <u>special</u>

premium to the enabling organization, as well as its members" (col 9, lines 10-26).

Also, Demir (2001/0044788) discloses offering terms of a transaction or discount or price

on goods or services based on a rate of reservation which is obtained by calculation results of

factors affecting the transaction (Fig. 4, 5, 9, 10; and below):

"[0049] FIG. 4 is a block diagram illustrating the <u>dynamic pricing</u> system

according to an embodiment of the invention coupled with a <u>booking</u> engine;

[0036] It is another object of the invention to provide a method for

dynamically pricing air charter services that includes the steps of receiving

trip request information, determining a maximal time allowance, forecasting

demand based upon the demand modules, matching demand based upon the received

trip request information, determining a price discount and outputting the

adjusted sale price based upon the price discount with a cancellation policy

directly associated with the price discount.

[0037] According to one embodiment, the invention provides for system

integration of a <u>booking</u> system with an intelligent pricing module. This

integration provides a seamless information transfer between a <u>booking</u> engine

and a pricing module.

[0058] FIG. 4 shows a block diagram of the dynamic pricing system integrated with a <u>booking</u> system according to an embodiment of the invention. FIG. 4 shows an intelligent pricing engine 201 that dynamically prices air charter services based upon demand matching and forecasting. The intelligent pricing engine 201 is a decision support system that enables automatically setting prices before fulfilling a trip. The intelligent pricing engine 201 includes a computer 210 coupled to a storage device 220, a demand forecasting module 230 and a demand matching module 240. A <u>booking</u> engine is coupled to the intelligent pricing engine 201 and receives trip requests through various channels from customers.

[0077] In step S160, the system generates a price discount based upon the demand matching information, along with information related to incentive promotions, targets and competitions The process then goes to step S170".

Also, notice that Demir's 'bookings' are equivalent to reservations:

"[0063] As an example, a traveler 1 <u>books</u> a trip at a time t.sub.1 from point A to B starting at t.sub.1(A)".

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Demir's dynamic pricing based on demand targets and demands received to Schiff's and DeLorme's dynamic pricing based on a variety of factors relevant to the provider and/or users. One would have been motivated to do this in order to offer pricing or discounts relevant to the situation.

As an alternative to Demir, Campbell (5,918,209) discloses discloses offering terms of a transaction or discount or price on goods or services based on a rate of reservation which is obtained by calculation results of factors affecting the transaction (Fig 2a, 7, 8, 11a, 11b; Claim 36; Claim 43).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Campbell's dynamic pricing based on demand targets and demands received to Schiff's and DeLorme's dynamic pricing based on a variety of factors relevant to the provider and/or users. One would have been motivated to do this in order to offer pricing or discounts relevant to the situation.

Claims 2, 8, 9, 10, 11, 12: Schiff discloses a method, system, apparatus, medium for accepting transaction reservation provided with a plurality of terminal devices, and an apparatus for accepting transaction reservation, connected to the terminal devices respectively, to accept reservation for a transaction of a transaction target, characterized in that

said accepting apparatus comprises:

(i) a terms determination means for determining terms for a transaction of a transaction target (col 11, line 60-col 12, line 17; col 12, lines 22-36); and

(ii) a transaction terms display means for displaying the terms for the transaction determined by the terms determinations means (col 7, lines 20-34; col 12, lines 22-36);

said terminal devices comprises:

(i) an accepting means for accepting reservation application data which represents reservation application for a transaction of a transaction target based on the displayed terms (col 12, lines 17-23; col 12, lines 22-36); and

(ii) a transmission means for transmitting the reservation application data accepted by the

accepting means to the accepting apparatus (col 12, lines 17-23; Fig. 1; Fig. 2A); and

said accepting apparatus further comprises a storage means for storing received reservation

application data, when the reservation application data is received (Fig. 2A).

Schiff further discloses a storage medium and a controller (Fig. 2A).

Schiff further discloses that incentives, time periods, and reservations are related (col 22,

lines 1-13; col 1, lines 22-26), accepting the transaction reservation for the transaction target,

performing a transaction in accordance with the transaction reservation (col 12, lines 17-36), and

re-presenting data based on the accepted transaction reservation for the transaction target (col 11,

lines 10-16; Fig. 2b; Fig. 3a).

Schiff does not explicitly disclose that the discounts are related to the time period that the

reservation is made for.

However, DeLorme discloses that presenting bargain data to a transaction target related

to the time period that the reservation is made for (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6; col

41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45).

DeLorme further discloses re-presenting bargain data based on the accepted reservation

for the transaction target (Fig. 9b; Fig. 7b; Fig. 7a; Fig. 5d, item 595).

DeLorme further discloses a terms determination unit for determining terms for a

transaction of a transaction target for each time period (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6;

col 41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45); and

a display system for displaying the terms for the transaction, wherein the transaction reservations

are made via the plurality of terminal devices based on the display terms for the transactions

(Fig. 5d; Fig. 1c; Fig. 9b).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to add DeLorme's reservations goods or services with time period based

discounts to Schiff's time period, reservation, discount related information. One would have

been motivated to do this in order to provide the customer with further, specific information on

the relation of time periods, reservations, and discounts.

Baker further discloses benefits and discounts (col 1, lines 10-50); reservations (Fig. 3);

timing restrictions and other terms on applicable discounts (col 1, lines 55-62); time frame

restrictions and other terms on applicable discounts (col 5, lines 35-45; col 6, lines 40-47; col 6,

lines 47-61; col 7, lines 4-11);

Baker further discloses offering specialized target discounts where the terms or target can

be varied including varying time periods for when the discount would apply (col 8, line 60-col 9,

line 10) and specialized discounts based on the time between the when the reservation is made

and when the reservation is made for (col 9, lines 14-26).

Baker further discloses correlating time periods for reservations to discounts (col 9, lines

31-64).

Baker further discloses that different time periods have different discounts and that the

discount information for the different time periods is dynamic (col 10, line 59-col 11, line 7).

Also, note that Baker discloses that the time between when the reservation is made and the time

that the reservation is made for can be relevant to the discount amount (col 9, lines 14-26).

Therefore, both the reservation time and the time period the reservation is made for are relevant to the discount.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Baker's reservations for goods or services with time period based discounts that reflect temporarily changing conditions to Schiff's time period, reservation, discount related information. One would have been motivated to do this in order to provide the customer with further, specific information on the relation of time periods, reservations, and discounts.

Also, please see the analysis for claims 1 and 17 above.

Claim 3: Schiff and DeLorme and Baker and Cragun and Demir or Campbell disclose a method according to claim 2. Schiff further discloses that the determination of the terms for a transaction comprises: determining terms for a transaction based on the state of the transaction reservation (col 20, lines 35-49; col 22, lines 1-13).

Bake further discloses determining terms for a transaction based on the state of the transaction reservation (col 9, lines 15-25).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Baker's further features for determining terms for a transaction based on the state of the transaction reservation to Schiff's transactions, reservations, and varying terms. One would have been motivated to do this in order to honor the transactions appropriately based upon the set reservations conditions.

Claim 4, 6: Schiff and DeLorme and Baker and Cragun and Demir or Campbell disclose a method according to claim 2.

Schiff does not explicitly disclose confirming whether the reservation has been accepted.

However, Schiff discloses a variety of communication between a travel agent and a customer (col 1, lines 33-36). Schiff further discloses verifying that a customer is available (col 2, lines 35-40). Schiff further discloses booking and paying for a reservation (Fig. 3A, item 342, item 344).

Schiff further discloses receiving reservations, booking, and payment information (col 12, lines 17-23).

Schiff further discloses sending a response to a user computer after receiving messages from the user computer (col 11, lines 13-15).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that Schiff's response to a user computer can be a confirmation of the reservation that the user has made. One would have been motivated to do this because user's are more confident that a reservation is valid when the user receives notification that the reservation was received.

Additionally, DeLorme discloses confirming whether the reservation has been accepted (Fig. 5d, item 595; col 3, lines 15-20).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that DeLorme's confirmation of the reservation that the user has made to Schiff's response to a user computer`. One would have been motivated to do this because user's are more confident that a reservation is valid when the user receives notification that the reservation was received.

Claim 5, 7: Schiff and DeLorme and Baker and Cragun and Demir or Campbell disclose

a reception method for deal booking according to claim 4.

Schiff further discloses that it is characterized in that it further comprises the following

steps:

a method according to claim 4, further comprising the steps of: ·

determining discount services for the reserved transaction which has been confirmed to be

accepted based on its terms (col 20, line 49-col 21, line 12; col 13, lines 17-22); and

offering the discount services based on the confirmed reserved transaction (col 1, lines 22-26; col

22, lines 1-5; col 12, lines 14-17).

Since Schiff discloses that specific packages can be offered to specific customers and that

packages can include special discounts and that specific customers can reserve transactions,

Schiff discloses offering the discounts for reserved transactions.

Claim 13, 14, 15, 16: Schiff discloses a method, apparatus for accepting a transaction

reservation for a transaction target, comprising:

presenting bargain data in relation to the transaction target and reflecting time dependent

booking (col 1, lines 22-26); and

accepting the transaction reservation for the transaction target, and performing a

transaction in accordance with the transaction reservation (col 12, lines 17-36).

Schiff further discloses that incentives, time periods, and reservations are related (col 22,

lines 1-13; col 1, lines 22-26).

Schiff further discloses re-presenting data based on the accepted transaction reservation

for the transaction target (col 11, lines 10-16; Fig. 2b; Fig. 3a).

Schiff does not explicitly disclose that the discounts are related to the time period that the

reservation is made for.

However, DeLorme discloses that presenting bargain data to a transaction target related

to the time period that the reservation is made for (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6; col

41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45).

DeLorme further discloses re-presenting bargain data based on the accepted reservation

for the transaction target (Fig. 9b; Fig. 7b; Fig. 7a; Fig. 5d, item 595).

DeLorme further discloses a terms determination unit for determining terms for a

transaction of a transaction target for each time period (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6;

col 41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45); and

a display system for displaying the terms for the transaction, wherein the transaction reservations

are made via the plurality of terminal devices based on the display terms for the transactions

(Fig. 5d; Fig. 1c; Fig. 9b).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to add DeLorme's reservations goods or services with time period based

discounts to Schiff's time period, reservation, discount related information. One would have

been motivated to do this in order to provide the customer with further, specific information on

the relation of time periods, reservations, and discounts.

Baker further discloses benefits and discounts (col 1, lines 10-50); reservations (Fig. 3);

timing restrictions and other terms on applicable discounts (col 1, lines 55-62); time frame

restrictions and other terms on applicable discounts (col 5, lines 35-45; col 6, lines 40-47; col 6,

lines 47-61; col 7, lines 4-11);

Baker further discloses offering specialized target discounts where the terms or target can be varied including varying time periods for when the discount would apply (col 8, line 60-col 9, line 10) and specialized discounts based on the time between the when the reservation is made and when the reservation is made for (col 9, lines 14-26).

Baker further discloses correlating time periods for reservations to discounts (col 9, lines 31-64).

Baker further discloses that different time periods have different discounts and that the discount information for the different time periods is dynamic (col 10, line 59-col 11, line 7). Also, note that Baker discloses that the time between when the reservation is made and the time that the reservation is made for can be relevant to the discount amount (col 9, lines 14-26). Therefore, both the reservation time and the time period the reservation is made for are relevant to the discount.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Baker's reservations for goods or services with time period based discounts that reflect temporarily changing conditions to Schiff's time period, reservation, discount related information. One would have been motivated to do this in order to provide the customer with further, specific information on the relation of time periods, reservations, and discounts.

Also, please see the analysis for claims 1 and 17 above.

Response to Arguments

5.   Applicant's arguments with respect to claims 1-17 and 20 have been considered but are

moot in grounds of the new rejection. Please particularly note the rejection of claims 1, 17

starting with the sections that states, "Additionally, DeLorme discloses offering the services

based on the confirmed reserved transaction and DeLorme discloses valid reservation

confirmations and offering reservations that allow the utilization of special offers or discounts. .

." and thru to the end of the rejection of the independent claims 1 and 17.

        Also, the Amendment dated 10/6/05 states that critical features of the Applicant's claims

are offering the services based on the confirmed reserved transaction, valid reservation

confirmations, offering reservations that allow the utilization of special offers or discounts,

discount services defined for different time intervals, time intervals within predefined time

period based on a rate of reservation which is obtained by calculation results of factors affecting

the transaction. Please see the stated section above in the rejection of claims 1 and 17 to see how

the combination of the prior art renders these features obvious.

        Also, Applicant's, 'factors affecting the discount service', and other features of the

Applicant's claims are broad and or loosely defined and can be interpreted in several ways.

Examiner further notes that it is the Applicant's claims as stated in the Applicant's claims that

are being rejected with the prior art. Although the claims are interpreted in light of the

specification, limitations from the specification are not read into the claims. See *In re Van

Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

        Examiner notes that while specific references were made to the prior art, it is actually

also the prior art in its entirety and the combination of the prior art in its entirety that is being

referred to. Also, one cannot show nonobviousness by attacking references individually where

the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

The following prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

a) Bradford (20020004759) discloses dynamic pricing based on reservations made and

other factors:

"[0056] For example, in the travel industry (hotel rooms, rental cars, travel

vouchers, plane tickets, train tickets, bus tickets, and other ancillary

services), sophisticated yield management systems incorporated into <u>reservation</u>

systems may continually <u>adjust the price</u> of an item. Thus, the reservation

system can continually use the process of FIG. 2 to update the pricing for a

listed item. Thus, for example, the listing price ($P) could be lowered or

raised as needed. Similarly, as the departure time arrives, the item could be

shifted from reward inventory to barter inventory.

[0065] Assuming that two days before the <u>reservation</u> night, the luxury hotel

room is still not booked, the <u>reservation</u> system might lower the price, e.g. $P

of $200, $X of $20, preference for barter. This is not a necessary set of

changes, but one selected by the seller with a preference to moving the

inventory and getting a sale rather than losing the room. At this new price,

the inventory just meets the barter/cash ratio of 20% and is classified as

barter at step 202. Most generally, a tolerance around the barter/cash ratio

%C 230 can be used. This may cause the re-computation of one or more rewards

for other inventory by that seller--of which there is none in this example.

The inventory would then be listed for barter at step 206 with the potential

buyer needing to pay $20 and #180.

[0066] In fact, the <u>reservation</u> system could be continually updating the

pricing of an inventory item up until the time of sale. As such the process of

FIG. 2 can be run continuously and separately from the process of FIG. 3 to

allow for maximum seller pricing flexibility";

b) Fox (20050222865) discloses dynamic pricing based on reservations made and other

factors:

"[0013] A second aspect of the invention provides a method for management of

inventory items associated with future events, such as ad time segments. As

before, the method includes steps of (a) receiving a customer request for an

inventory item, (b) generating a table one or more inventory items that most

closely correspond to the customer request using a price forecasting system,

.COPYRGT. selecting an item from the table, and (d) generating a price

quotation associated with the selected inventory item using the price

forecasting system. Next, it is determined if the customer request comprises

an order for which the customer is expected to pay, or a reservation of the

selected inventory item, which reservation has an associated probability of

later becoming an order. Information is stored, e.g, in a data file on a hard

drive or similar storage medium, describing the customer request, including an

indication of whether the request is an order or reservation. Information

needed for price recalculation associated with the customer request is input

into the yield management system. This information can vary depending on the

pricing strategy the yield management system employs, but preferably includes

the amount of time sold and the identity of the time or program segment,

including the station name and date. The pricing data is recalculated with the

yield management system in a manner consistent with a pricing strategy

implemented by the yield management system, so that price changes caused by a

reduction in available inventory due to the customer order or reservation are

taken into account. This represents a departure from prior practice in which

reservations were not taken into account until such reservations matured into

orders. According to a preferred form of this method, the recalculation is

made in a manner that assigns reservations less weight than orders in making

such recalculation, especially a weight proportional to an estimated

probability that the reservation will later result in an order. An inventory

management system corresponding to this method provides suitable software for

entering, storing, retrieving data concerning reservations in a manner consistent with the

described steps".

c) Walker (5,797,127) discloses prices related to changing conditions such as weather:

"(6)   The underlying commodity is well defined for an option to buy an airline ticket for

the first type of customer--it is a ticket on a particular flight. Pricing this type of option,

however, is not straightforward because the option price will depend on a number of factors that

are not present in other commodities. For example, the price of an option on a particular flight

may depend upon the date and time of the flight, the day of the week, the <u>weather, special</u>

occurrences in one of the cities (such as the Olympics) and numerous other factors".

d) Fox (6,584,447) discloses promotions related to changing conditions such as weather:

"(42)   In summary, the above conventional solutions to <u>weather</u> planning problems in

retail all suffer from one or several deficiencies which severely limit their commercial value, by

not providing: (1) regional and/or local specificity in measuring past <u>weather</u> impact and

projecting future <u>weather</u> impact, (2) the daily, weekly, and monthly increment of planning and

forecasting required in the retail industry, (3) ample forecast leadtime required by such planning

applications as buying, advertising, <u>promotion,</u> distribution, financial budgeting, labor

scheduling, and store traffic analysis, (4) the quantification of <u>weather</u> impact required for

precise planning applications such as unit buying and unit distribution, financial budget

forecasting, and labor scheduling, (5) reliability beyond a 3 to 5 day leadtime, (6) a predictive

<u>weather</u> impact model, which links quantitative <u>weather</u> impact measurement through historical

correlation, with quantitative forecasts, (7) the ability to remove historical <u>weather</u> effects from

past retail sales for use as a baseline in sales forecasting, (8) an entirely electronic,

computerized, EIS implementation for ease of data retrieval/analysis with specific functions that

solve specific managerial planning applications, and (9) a graphical user interface representing a

predictive model in graphs, formats, and charts immediately useful to the specific managerial

applications."

e) Ouimet (6,078,893) discloses prices related to changing conditions such as weather:

"(24)   where [D] are the demand parameters, and [X] is the set of all variables for all

items. Notice that in general, the sales of one item can depend upon the parameters of all the

other items. The reason for this is that the demand for a single item can and usually does

depend upon the demand for all other items. This can in general lead to a system of coupled

equations that describe the demand for each item in a given group. The variables that affect the

demand can include, but is not limited to, price, sales history, promotional activity, weather

conditions, location, currency exchange rate, inflation rate, etc."

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

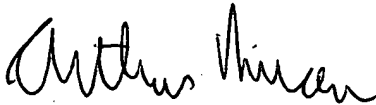Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Arthur Duran whose telephone number is (571) 272-6718. The

examiner can normally be reached on Mon- Fri, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Arthur Duran
Patent Examiner
11/3/05